

SIMPLE STAINING METHOD FOR *TRICHOMONAS VAGINALIS**

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In a recent annotation in this Journal (1952) it was pointed out that before *Trichomonas vaginalis* could be identified with certainty in stained films the flagellar structure had to be demonstrated, and that successful staining of this structure depended upon careful fixation of the film. This need for careful fixation appears to be the main reason why only experts obtain uniformly good results with the staining methods in common use. Attention is drawn to the following procedure, in which no such preliminary care is necessary.

stand for a few days, and filtered again before use.

Rarely, with some batches of the dye, it will be found that 0.5 per cent. stains too deeply for proper differentiation. In this event the amount of dye should be reduced to 0.25 per cent.

(2) Immerse a loopful of the fluid to be examined in the stain by placing first one then the other side of the loop in the drop.

(3) Spread the material on the slide by working from the centre outwards with a circular motion. This ensures that at least some parts of the film are sufficiently thin for the flagella to be clearly seen.



FIG. 1.—Flagella visible, but nucleus is not clearly differentiated from ectoplasm and probably represented by dark central mass. Photomicrograph ($\times 500$).

Method

(1) Place a drop (about 0.02 ml.) of 0.5 per cent. methyl violet 6.B in distilled water in the centre of a slide. Freshly made stain should be filtered, allowed to

(4) Allow to dry in the air.

(5) Fix with heat.

(6) Stain with methyl violet for 30 sec.

(7) Wash in water and dry.

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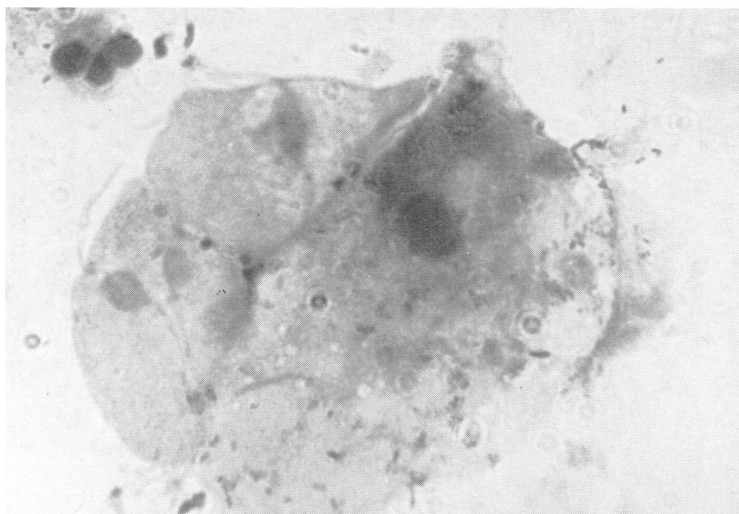


FIG. 2.—Nucleus, axostyle, and flagella. One trichomonad appears to have two nuclei and two axostyles. Note how shape of trichomonads is altered by contiguous cells. Photomicrograph ($\times 1200$).

Results

The ectoplasm of the parasite stains lightly and contrasts with the endoplasm which is more deeply stained. The characteristic shape is usually lost, the parasite having a circular or irregular outline. The undulating membrane is only occasionally demonstrable. The nucleus, axostyle, and flagella

are not invariably visible, but are seen sufficiently often for this method to compare favourably with the wet-film methods from a diagnostic viewpoint. Some typical appearances are shown in the accompanying photomicrographs (Figs 1 and 2).

REFERENCE

Annotation (1952). *British Journal of Venereal Diseases*, 28, 144.